



South Dakota Board of
Technical Education

May 25, 2023

Mitchell Technical College
1800 E Spruce St
Mitchell, SD 57301

**RE: South Dakota Board of Technical Education Approval of:
Non-Substantive Program Application
Diploma in Wind Turbine Technology**

To whom it may concern:

After review, the executive director has approved above application.

Per Board Policy 303.3, the receipt of this letter completes the SDBOTE's approval process, and the technical college may proceed with program implementation.

The SDBOTE's approval is valid for three years upon the date of this letter. If a technical college does not implement an approved program within three years, approval is terminated.

A technical college must update the program's profile in the SDBOTE's Academic Program Database by June 30 prior to the year in which students are first enrolled or at least 30 days prior to enrolling students, whichever is first.

Sincerely,

Scott DesLauriers
Deputy Director
South Dakota Board of Technical Education
800 Governors Drive
Pierre, SD 57006
Scott.DesLauriers@state.sd.us
(605) 295-7033

PROGRAM DESCRIPTION

Institution	Mitchell Technical College
Program Identifier Code (If applicable)	N/A
Program Title	Wind Turbine Technology
Program Award Level:	<input type="checkbox"/> Short-Term Certificate <input type="checkbox"/> Long-Term Certificate <input checked="" type="checkbox"/> Diploma <input type="checkbox"/> Associate of Applied Science <input type="checkbox"/> Associate of Applied Science Option
CIP Code (6 Digit)	15.0503
Projected Implementation Date	7/1/2023
Approved Parent Program Title (If applicable)	N/A
Approved Parent Program Identifier Code (If applicable)	N/A
Location	<input checked="" type="checkbox"/> Main Campus <input type="checkbox"/> Other:

SUMMARY

Type of Non-Substantive Change	<input type="checkbox"/> Program created using subset of existing courses (B.1.1) <input type="checkbox"/> Creation of associate of applied science option (B.1.2) <input type="checkbox"/> Consolidation of existing programs (B.1.3) <input checked="" type="checkbox"/> Program award level change (B.1.4) <input type="checkbox"/> Other:
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Describe the change the institution is seeking approval of.

Mitchell Technical College is requesting an award level change from Associate of Applied Science degree to Diploma for the Wind Turbine Technology program. Industry does not require an AAS for employment or advancement. Recruitment would be more successful with a 9-month option similar to Powerline Construction and Maintenance.

Recruiters believe incoming students will be attracted to a 9-month program for faster entry into the workforce. The wind industry will hire high school graduates and train within their company, but value a year of personal growth that typically happens in the first year of post-secondary education.

The curriculum is established. The newly hired instructor, who recently spent the past 10 years training new hires in the wind industry, has tweaked the amount of time required in the classroom by focusing on the skills necessary for graduates to be hired at any company. Much of the time currently spent on reinforcing competency requirements is no longer necessary due to changes in the industry.

CRITERION 2: DEMAND

The program leads to meaningful employment, adequate student enrollment, and/or fulfills needs not being met by existing education and training providers.

- 2.1. The program leads to high-wage occupations that have an average/mean wage greater than the median wage across all occupations.
- 2.2. The program leads to high-demand occupations that have project annual openings (a measure of demand for workers) greater than the average across all occupations or is shown as an economic and/or labor market emerging field for the state of South Dakota and its regions.
- 2.3. The program's student enrollment is adequate to justify program existence.
- 2.4. The program fulfills a demand not being met by existing education and training providers in the region and/or state.

2.1. Describe the wage projections for occupations associated with the proposed program by completing Appendix 2.A.

2.2. Describe the demand projections for occupations associated with the proposed program.

A. Complete Appendix 2.A.

B. If an emerging field for the state of South Dakota, describe the field. Letter(s) of support, detailing demand, should be attached as appendices.

MTC has offered the Wind Turbine Technology program since 2009. The diploma option was discontinued in 2013.

At the March 2023 advisory board meeting, members unanimously agreed to eliminate the AAS option and move to a diploma option. The industry does not require an AAS degree for entry to the workforce nor for promotion. Much of the discussion surrounded the needed skillset for entry and advancement opportunities. When the wind program first began, training opportunities were few. Now, however, industry partners enroll all new hires in company specific training programs regardless of degree(s) earned.

2.3. Describe projected student enrollment for the proposed program by completing Appendix 2.B.

2.4. Describe how the proposed program fulfills a demand not being met by existing education and training providers in the region and/or state.

A. Identify closely related program(s) that currently exist at other public higher education institutions in the system or state. If none, write "None."

None.

B. If applicable: Describe the ways in which the demand is not currently being met by the aforementioned program(s) and provide justification as to why the program should be approved by addressing the following conditions that warrant duplication ([BP 303.2](#)). Select all that apply.

- ☐ Unmet Demand (C.5.1.1)
☐ Industry Partnership (C.5.1.2)

- ☐ Increases Student Access (C.5.1.3)
☐ Other:

I. For each condition selected above, provide a brief justification

CRITERION 3: DESIGN

The program's learning assessment strategy, program of study, and delivery methods are designed to provide students with the necessary competencies, as demonstrated through program learning outcomes.

- 3.1. The program is aligned to competencies, as demonstrated through program learning outcomes, that are developed with and continually validated by relevant stakeholders.
- 3.2. The program has a learning assessment strategy to validate student mastery of the program learning outcomes.
- 3.3. The program has an integrated program of study designed to develop and reinforce the program learning outcomes.
- 3.4. The program, when appropriate, includes a work-based learning component that develops and reinforces the program learning outcomes.
- 3.5. The program, when appropriate, offers flexible delivery methods to increase student access.

3.0. Describe the proposed program's alignment with the program award level requirements established in [BP 301.1](#).

A. Does the program align with the requirements?

- ☒ Yes
☐ No (Requesting Exemption)

B. If no: Provide a detailed rationale for program exemption. Specify which requirement(s) in BP 301.1 are not met; cite specific policy sections (e.g., B.3.4), when appropriate. If external organizations are involved (accreditation, regulatory, licensure, etc.), reference the organization name(s), specific requirements (including citations), and a justification for why the exemption should be approved.

3.1. Describe the program learning outcomes.

A. Provide a list of program learning outcomes for each proposed award level. Learning outcomes should be specific to the program.

- Demonstrate OSHA-required safety while ascending and descending a 300' wind turbine.
- Demonstrate an understanding of the mechanical, electrical, and control systems and sub-systems common to modern wind turbines.
- Demonstrate basic troubleshooting and problem-solving skills required to maintain a wind turbine.
- Troubleshoot complicated electrical problems on variable pitch systems.
- Demonstrate tower rescue
- Demonstrate basic electrical concepts required to maintain a wind turbine.
- Demonstrate the ability to use handheld test equipment to troubleshoot electrical circuits.
- Demonstrate understanding of Lock Out/Tag Out (LOTO) procedures for wind turbine and other equipment maintenance.
- Perform mechanical, hydraulic, and electrical component maintenance, repair, and replacement of parts to correct malfunctions.
- Troubleshoot and maintain control and PLC systems.

B. Describe the how the program learning outcomes were developed and validated.

The program learning outcomes have been reviewed and approved annually through advisory board meetings and administration support. The program competencies remain the same as the current AAS offering. The time spent in the classroom is being reduced to accommodate more hands-on learning to better prepare the students for entry-level workforce positions in the wind industry. The current instructor has proposed the comprehensive curriculum that is 75% lab and 25% didactic. Because of the focused learning, students will require less time to master the skills needed for entry-level employment.

Industry support has changed the program at MTC with two new wind labs- one indoor, and one outdoor. The equipment donations allow for students to work as a group in the hands-on environment. The labs offer the opportunity for several students to work at one time; something that was not available until now. Students no longer have to travel 50 miles to the White Lake tower to put theory into practice.

Wind employment has a 44% growth projection from 2021-2031 and employers look to Mitchell Technical College to fill the gap between apprenticeship and on-the-job training hires. The length of training in these program ca be anywhere from six-weeks to six-months. The learning outcomes remain true to what industry requires and can be accomplished in far less time.

Additionally, courses that were taught in the AAS program as enhancements to the core curriculum have been merged into the revised curriculum so the concepts are introduced but do not require semester-long reinforcement.

3.2. Describe the program's learning assessment strategy.

A. Describe how students will demonstrate mastery of the program learning outcomes. Description should be specific to the program's learning assessment plan vs. the institutional assessment plan.

Students will demonstrate mastery of student learning outcomes through a variety of formative and summative assessments including competency demonstration, course exams, written and oral presentations, and team projects.

Alumni and employer surveys are analyzed to ensure the program outcomes are being met.

Each year, the program director and academic team meet to review outcomes and analyze data to determine mastery and areas for improvement.

B. Is the program preparation for a professional licensure and/or certification examination?

- ☐ Yes (Detail in Appendix 4: Section 3)
☒ No

3.3. Describe the program of study by completing Appendix 3.

3.4. Describe the program's work-based learning component.

A. Does the program have a work-based learning component? If so, select all that apply.

- | | |
|---|-----------------------------------|
| <input checked="" type="checkbox"/> None | <input type="checkbox"/> Clinical |
| <input type="checkbox"/> Apprenticeship | <input type="checkbox"/> Capstone |
| <input type="checkbox"/> Internship or Externship | <input type="checkbox"/> Other: |

B. If none, describe why.

The curriculum includes several hands-on laboratory experiences similar to industry work environments. Industry partners hire students without an internship. An internship would require additional time and expense that students do not need to incur in order to secure an excellent position in the wind industry.

3.5. Describe the program's delivery methods.

A. Select the program's primary delivery method(s)¹. Select all that apply.

- | | |
|---|---|
| <input checked="" type="checkbox"/> On Campus | <input type="checkbox"/> Apprenticeship |
| <input type="checkbox"/> Online | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Blended | |

B. Describe how flexible delivery methods are being leveraged to increase student access.

Industry partners have been generous in donating equipment for a hands-on lab on the college campus. Students must be in the lab setting to master competencies required for graduation and entry into the field. The use of learning modules, presentations, safety strategies and experiential learning opportunities within a real-world environment provides greater learner involvement, encourages problem solving and critical thinking skills, and improves retention.

¹ **In Person:** 100 percent of courses are available in-person. **Online:** 100 percent of courses are available via distance learning. Delivery is only via the Internet. **Blended:** Delivery includes a required combination of both in-person and online courses. If a student has the option to take courses online, but is not required to do so, the program is not necessarily considered blended.

CRITERION 4: ALIGNMENT

The program is vertically aligned to an education and training pathway.

- 4.1. The program is vertically aligned to an education and training pathway, reflecting efficient articulation of:
 - 4.1.1. Non-degree credential/industry certification
 - 4.1.2. Certificate to diploma
 - 4.1.3. Diploma to associate of applied science
 - 4.1.4. Associate of applied science to baccalaureate

4.1. Describe the alignment of the proposed program along an education and training pathway.

A. Complete Appendix 4.

B. Describe the projected alignment between the proposed program and existing academic programs within the technical college system.

The wind diploma is an excellent entry point for obtaining an AAS degree in Electrical Utilities and Substation Technology.

C. As applicable: Insert any additional comments here.

SOUTH DAKOTA BOARD OF TECHNICAL EDUCATION
Appendix 2.A: Labor Market Information

Mitchell Technical College
Diploma- Wind Turbine Technology

SOUTH DAKOTA								
SOC* CODE	SOC* TITLE	AVERAGE ANNUAL OPENINGS	2020 EMPLOYMENT	2030 EMPLOYMENT	NUMERIC CHANGE: 2020-2030	PERCENT CHANGE: 2020-2030	MEDIAN: ANNUAL WAGE (2021)	AVERAGE: ANNUAL WAGE (2021)
49-9081	Wind Turbine Service Technicians	59	273	483	210	76.92	\$47,593	\$53,275

NATIONAL								
SOC* CODE	SOC* TITLE	AVERAGE ANNUAL OPENINGS	2021 EMPLOYMENT	2031 EMPLOYMENT	NUMERIC CHANGE: 2021-2031	PERCENT CHANGE: 2021-2031	MEDIAN: ANNUAL WAGE (2021)	AVERAGE: ANNUAL WAGE (2021)
49-9081	Wind Turbine Service Technicians	1,900	11,100	16,100	49,000	4430.00%	\$56,260	\$58,580

SOURCE: South Dakota Department of Labor and Regulation, Labor Market Information Center (LMIC) (<https://dlr.sd.gov/lmic/>)
U.S. Bureau of Labor Statistics (www.bls.gov/OES)

DATE: 3/17/23

NOTES:

SOUTH DAKOTA BOARD OF TECHNICAL EDUCATION

Appendix 2.B: Student Demand Projections

Mitchell Technical College

Diploma- Wind Turbine Technology

	YEAR 1	YEAR 2	YEAR 3
Student Full-Time Equivalent (FTE)	12	16	20
Headcount: Full-Time	12	16	20
Headcount: Part-Time	0	0	0
Headcount: Total	12	16	20
Total Program or Site Capacity	24	24	24

SOUTH DAKOTA BOARD OF TECHNICAL EDUCATION

Appendix 3: Program of Study

Mitchell Technical College
Diploma- Wind Turbine Technology

MONTHS:	9
SEMESTERS:	2
TOTAL CREDITS:	37.5

PREFIX AND NUMBER	TITLE	CREDITS	DESCRIPTION	EXISTING COURSE
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I. GENERAL EDUCATION CORE				
MATH 103	Mathematical Reasoning	3	This course is designed to develop students' problem-solving skills and quantitative reasoning through topics including: problem-solving processes, logic, percentages, measurement, ratios and proportions, statistics, linear equations, geometry and trigonometry, and personal finance.	Y
ENGL 110	Workplace Communications	3	This course emphasizes written and oral skills needed for success in the workplace. Students will practice professional communications through activities and collaborative projects. Instruction will provide students with strategies for addressing essential writing, speaking, and listening skills.	Y
SSS 100	Student Success	1	Provides a foundation for gaining the knowledge, skills and attitudes necessary for college success. Students will learn to make a successful transition to higher education by setting up a pattern of success that will last the rest of their lives. Students will define goals and develop thinking skills, learning strategies and personal qualities essential to both academic and career success. Please note: Students who have served active military duty (excluding basic training and AIT) may be exempt from the Student Success course. Student must provide a copy of DD214 or other official military documentation to the registrar for verification.	Y
SUBTOTAL OF GENERAL EDUCATION CREDITS:		7	TOTAL NEW COURSES:	0

SOUTH DAKOTA BOARD OF TECHNICAL EDUCATION

Appendix 3: Program of Study

Mitchell Technical College

Diploma- Wind Turbine Technology

II. PROGRAM CORE				
WTT 102	Intro to Wind Technology	2	An overview of major and minor components in the construction of a wind turbine. This includes the function of the bottom control cabinet, top control cabinet and hub control panel or hydraulic system. The different types of generators, gearboxes and gear reduction drives used in yawing the nacelle and pitching of the blades are explained. Students will also study the characteristics of different types of air foils when dealing with blade designs.	Y
WTT 112	Electronics I	4	The study of alternating current (AC) circuits begins with the generation of a sine wave and review of trigonometric functions and continues through resonance and filter circuits. In-depth look at inductors and capacitors and how they affect an AC and DC circuit differently. Introduction to the components of electronics, both passive and active. Subjects studied include power supplies, solid state components, frequency, resistance, capacitance, modulation, wave theory, testing devices and electronic systems as they are used in the control of a wind turbine.	Y
WTT 120	Motor Controls I	4	Students will learn the fundamentals of motor controls, including start stop stations, time delay circuits, sequence starting, synchronized starting, auto starting via pressure switch, etc. Students will use the knowledge they obtained from a prior semester to effectively negotiate the different control devices as well as implement the information received from schematic reading.	Y
WTT 100	Turbine Safety	1	Students are introduced to the correct climbing techniques in accordance with OSHA and standard industry practices. The students will learn the definition of "100% tie off" and understand tower rescue.	Y
WTT 104	Schematics	1	Students will be taught wiring diagram symbols. They will be able to identify both parallel and series circuits; draw pictorial and ladder diagrams; identify abbreviations for common electrical components; and be able to read the legend of a wiring schematic.	Y
OSHA 101	OSHA 10 Training	1	An overview of OSHA (Occupational Safety and Health Administration) standards focusing on hazard recognition and injury and illness prevention. The 10-hour construction program is intended to provide entry-level construction workers with awareness of hazards in and around the construction work site. Emphasis is placed on recognition and prevention and helps create a culture of safety. Upon successful completion the student will receive OSHA 10 certification.	Y
CPR 100	First Aid, CPR and AED	0.5	This course trains participants to provide first aid, CPR, and the use of an automated external defibrillator (AED). Students must complete the hands-on skill session. This class is offered for credit as a Pass/No Pass course.	Y
WTT 213	Electronics II	4	Students learn the theory of power supplies in this introduction to the components of electronics, both passive and active. Subjects studied include power supplies, solid state components, frequency, resistance, capacitance, modulation, wave theory, testing devices and electronic systems as they are used in the control of a wind turbine.	Y

SOUTH DAKOTA BOARD OF TECHNICAL EDUCATION

Appendix 3: Program of Study

Mitchell Technical College

Diploma- Wind Turbine Technology

WTT 217	Motor Controls II	4	Applications of control devices are reviewed. Photoelectric controls, logic modules, sequential motor starting, troubleshooting, acceleration and deceleration methods are studied.	Y
WTT XXX	Fluid Systems	3	This course covers the fundamentals and basic principles of fluid (hydraulic) power systems and their control circuits. Hydraulic components such as directional control valves, flow control valves, and pressure control valves will be covered. Accumulators, linear/rotary actuators and hydraulic pumps will be discussed along with practical applications and examples related to Wind Energy technology. Student will also acquire knowledge to read and draw hydraulic circuit schematics.	N
WTT XXX	Mechanical Systems	3	The objective of this class is to give the students an in-depth look at the tools and the types of mechanical systems that are typically encountered on a wind turbine. Students will learn the safe usage of large tools as well as their proper use. Students will gain an understanding of documenting gear, shaft, and bearing failures as well as what to look for when analyzing a failure.	N
CIS 107	Spreadsheets	3	Detailed instruction on the use of Microsoft Excel covering beginning, intermediate, and advanced concepts. Concepts covered include working with formulas and functions; creating and formatting charts graphs and pivot tables/pivot charts; sorting and filtering lists; data consolidation between multiple worksheets and workbooks; and importing and exporting of data.	Y
SUBTOTAL OF PROGRAM CREDITS:		30.5	TOTAL NEW COURSES:	2

SOUTH DAKOTA BOARD OF TECHNICAL EDUCATION

Appendix 4: Alignment Projection

Mitchell Technical College
Diploma in Wind Technology

TOTAL CREDITS IN PROPOSED PROGRAM:

37.5

I. STACKABLE OPPORTUNITIES							
PROGRAM NAME							
Electrical Utilities and Substation		Short-term Certificate	X	Existing	If Forthcoming: Projected Timeline	Total Credits in Stackable Program	How many PROPOSED PROGRAM credits are in this stackable program opportunity?
		Long-term Certificate		Forthcoming			
		Diploma					
	X	AAS				69	37.5
PROGRAM NAME							
Utilities Technology		Short-term Certificate	X	Existing	If Forthcoming: Projected Timeline	Total Credits in Stackable Program	How many PROPOSED PROGRAM credits are in this stackable program opportunity?
		Long-term Certificate		Forthcoming			
		Diploma					
	X	AAS				66	37.5
PROGRAM NAME							
		Short-term Certificate		Existing	If Forthcoming: Projected Timeline	Total Credits in Stackable Program	How many PROPOSED PROGRAM credits are in this stackable program opportunity?
		Long-term Certificate		Forthcoming			
		Diploma					
		AAS					
PROGRAM NAME							
		Short-term Certificate		Existing	If Forthcoming: Projected Timeline	Total Credits in Stackable Program	How many PROPOSED PROGRAM credits are in this stackable program opportunity?
		Long-term Certificate		Forthcoming			
		Diploma					
		AAS					

II. ARTICULATION AGREEMENTS (BACCALAUREATE)						
PROGRAM NAME	COLLEGE OR UNIVERSITY					
			Existing	If Forthcoming: Projected Timeline	Total Credits in Bachelor's Degree	How many PROPOSED PROGRAM credits are projected to be accepted in the articulation agreement?
			Forthcoming			
PROGRAM NAME	COLLEGE OR UNIVERSITY					
			Existing	If Forthcoming: Projected Timeline	Total Credits in Bachelor's Degree	How many PROPOSED PROGRAM credits are projected to be accepted in the articulation agreement?
			Forthcoming			
PROGRAM NAME	COLLEGE OR UNIVERSITY					
			Existing	If Forthcoming: Projected Timeline	Total Credits in Bachelor's Degree	How many PROPOSED PROGRAM credits are projected to be accepted in the articulation agreement?
			Forthcoming			

III. LICENSURE AND CERTIFICATION OPPORTUNITIES		
<i>The PROPOSED PROGRAM will qualify students to pursue the following licensure and/or certification opportunities:</i>		
LICENSURE/CERTIFICATION	OVERSIGHT ORGANIZATION	Will the licensure/certification require reporting per SDCL 13-1-61?
LICENSURE/CERTIFICATION	OVERSIGHT ORGANIZATION	Will the licensure/certification require reporting per SDCL 13-1-61?
LICENSURE/CERTIFICATION	OVERSIGHT ORGANIZATION	Will the licensure/certification require reporting per SDCL 13-1-61?

Wind Turbine Technology Advisory Board
Friday, March 24, 2023- 11:30 AM
Energy Training Center – Room 314

1. Introductions- Six industry partners present: Steve Wagaman, SD Energy Assn; Scott Houwman, Malloy; Mike Sherman, Renew Energy; Reed Lindgren, Nextera; Darin Clabaugh, Nextera; Luke Hinkle, Inv Energy. MTC present: Noah Brinkman, Program Director; Clayton Deuter, VP Enrollment; Carol Grode-Hanks, VP Academics. School Board Rep: Deb Olson.
2. Carol Grode-Hanks reviewed MTC's annual Fast Facts. Dual enrollment continues to grow offering students a financial savings by taking MTC classes as a high school junior or senior. Most take general education courses to get a jump start on their college careers, but some use the opportunity to graduate early. The Wind program has a fully dual enrolled student, Carson Jennings, who is doing very well in the first-year curriculum. He will graduate from high school late May and will return next fall as a 2nd-year student.
3. Clayton reported on the enrollment. The program began in 2009 with a healthy enrollment of 45. In 2013, the diploma option was dropped and enrollment began to fall. The Double Edge program helps students pay for school by having an industry partner team up with Build Dakota. Currently, there are no participants in Wind. For next year, we have 6 students accepted and 3 applications.
4. Retention for the program fluctuates as some students will leave after the first year to go straight to work. There were 3 graduates last year and single digits since 2015. Wages average \$23.88 and 100% of the graduates are employed in the field (at GE Wind, Invenenergy, LLC and Renew).
5. Curriculum review
 - a. Possible 1 year diploma was discussed. Several courses can be combined to meet the program outcomes and others can be dropped due to no longer being required to be a technician. The proposed curriculum includes Intro to Wind, Electronics 1 & 2, Motor Controls 1 & 2, Turbine Safety, Schematics, Fluid Systems and Mechanical Systems. Noah said the industry has changed since 2009 and technicians are no longer required to know a little about a lot. They really need to focus on the mechanics and troubleshooting.

Industry partners unanimously support the move to a one-year diploma highlighting the need for employees and that every company has their own training program. Students need to have functional knowledge and be able to learn quickly. The one-year diploma would provide that.

Several 12-week programs exist, but they are not good enough. The consensus is MTC graduates would be hired over walk-in hires or those who completed a short training program. No degree is needed to be promoted as everything is based on work

performance and job descriptions (Wind Tech 3, 2, 1, Senior, Leadership). Everyone starts at Wind Tech 3- and it is up to the individual to move up through skill demonstration. Wages can be doubled from the bottom to the top- earning six figures. No degree required.

- b. SCADA concepts, Composites, and Hydraulics- these three courses can be dropped.
- 6. Miscellaneous discussion included the high turnover in the industry – 25%. Many left due to the covid vaccination requirement. Tough time with work ethic- need to reinforce the importance of that while the students are still in school. There are many avenues for techs to move forward.
- 7. Discussion over recruitment ideas – maybe give a \$500 incentive to graduates who send a friend to MTC. Clayton mentioned this is a great idea but illegal. Suggested industry attend career expos and find local kids who would make great technicians. Getting involved in K-12 is good. Kid Wind program in Sioux Falls since 2000 includes 8 middle school teachers learning how to teach Wind in the classroom. SDSU Mike Tweet has been running the program.
- 8. Equipment needs: would like to have a generator. Scott Houwman has one. Nextera has a brush box. Noah mentioned he will take any and all broken parts (pitch motors, yaw motors....). MTC is very grateful for all donations and recognized the program could not possibly be successful without the generosity of industry partners. Now that the two labs are nearly complete, students have the opportunity to learn hands-on right here on campus. They still travel to the White Lake wind tower, but with the nacelles here on campus, they get inside and work on real problems.
- 9. Renew has 78 positions. Nextera has 80-100 positions. InvEnergy has 100 openings. The jobs are there.

To whom it may concern,

I am writing in support of transitioning the Wind Turbine Technology AAS degree to a one-year diploma program.

Recent trends in the industry have indicated that there is an immediate need for trained technicians. There have been many new certificate level programs ranging in length from 12 weeks to 1 year that I believe have discouraged future students from pursuing an AAS degree. These shorter programs offer the students the ability to begin their career sooner. This greatly benefits the employer as the industry continues to grow and has a large need to get technicians into the field quicker.

I also believe that the level of training that is needed for an entry level position with most employers within the industry can be accomplished by a one-year diploma offering. Many AAS programs are focusing more heavily on the technical aspects of items such as blade construction, aerodynamics, and other very complex items. In the industry these types of items are typically repaired or analyzed by experts in the field, not site level technicians. The core competencies that employers are looking for in a graduate include a high level of basic skills including business communication courses, wind turbine operations courses, safety related OSHA courses, climbing and rescue courses, schematic reading courses and a strong foundation in electrical knowledge. Offering these key skill sets in a one-year diploma program will help create success for these students once they enter the workforce.

Thank You

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